



Fig. 1

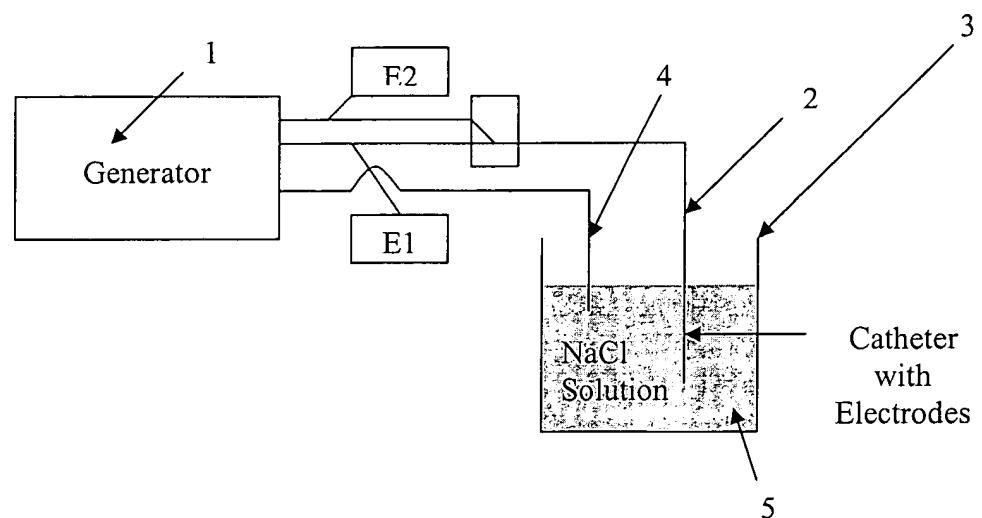
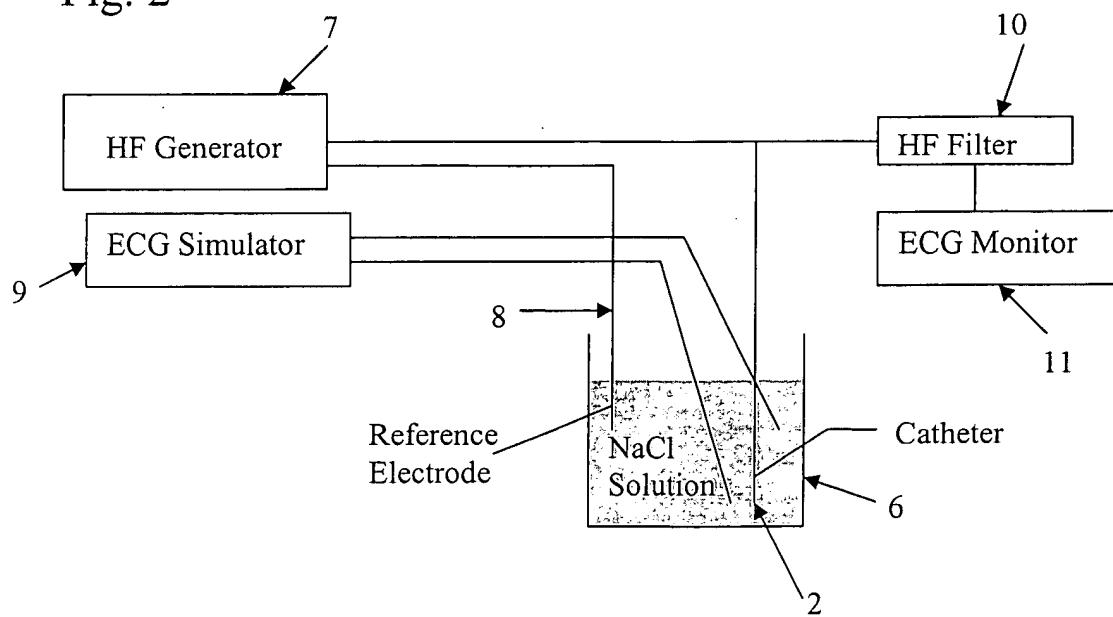
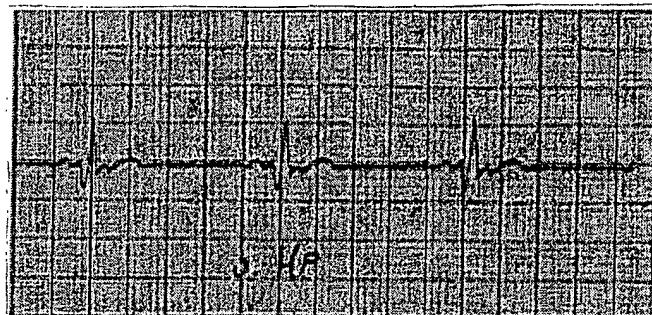


Fig. 2



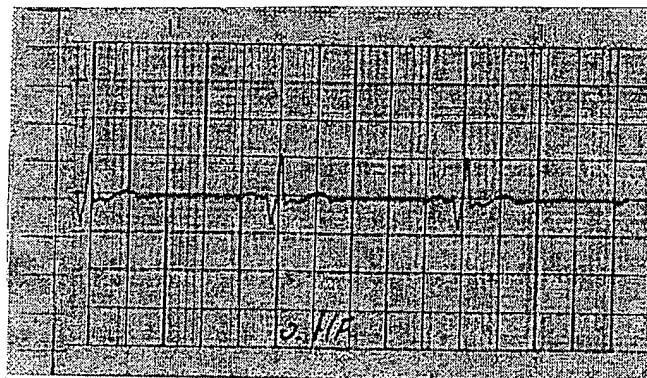
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Fig. 3



Mapping signal before electrode treatment without applied high-frequency energy

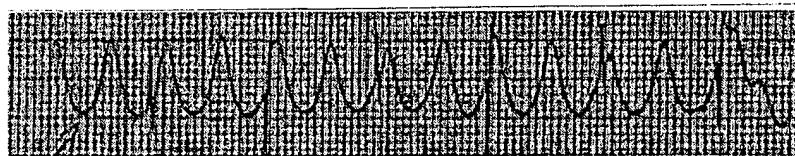
Fig. 4



Mapping signal after electrode treatment without applied high-frequency energy

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Fig. 5



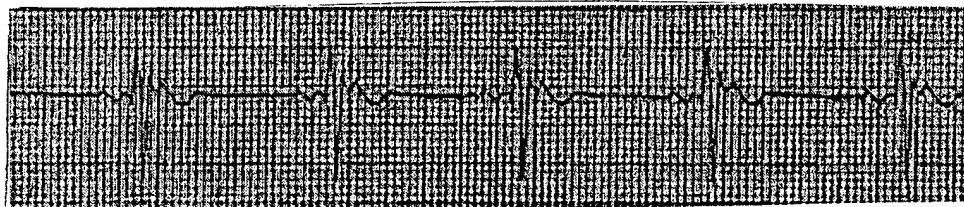
Interference in the simulated ECG signal in the case of fast, non-pulsed power regulation of the output high-frequency energy for a non-treated ablation catheter

Fig. 6



Interference in the simulated ECG signal in the case of fast, pulsed power regulation of the output high-frequency energy for a non-treated, quadrupole ablation catheter with cylindrical platinum electrodes each 4 mm long

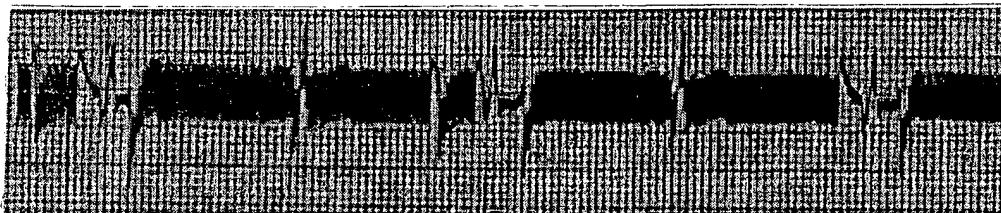
Fig. 7



Simulated ECG signal in the case of fast, non-pulsed power regulation of the output high-frequency energy for the quadrupole ablation catheter with cylindrical platinum ablation electrodes each 4 mm long, from Fig. 6 after its treatment

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Fig. 8



Interference in the simulated ECG signal in the case of fast, pulsed power regulation of the output high-frequency energy for a non-treated ablation catheter with a cylindrical platinum ablation electrode 4 mm long, and three further mapping electrodes

Fig. 9

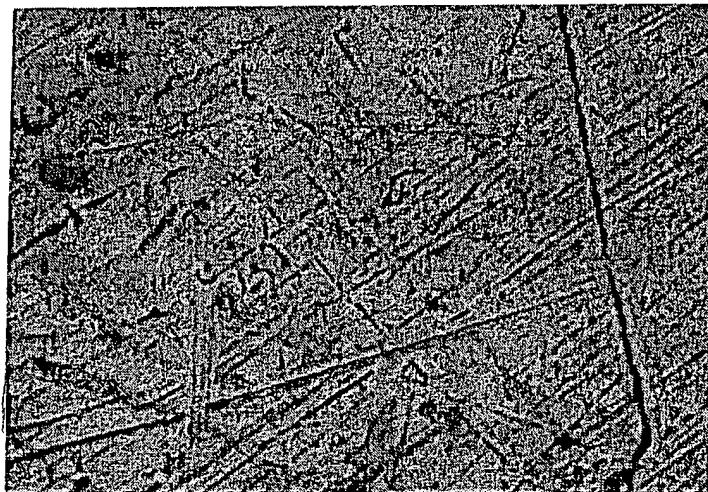


Simulated ECG signal in the case of fast, pulsed power regulation of the output high-frequency energy for the non-treated ablation catheter from Fig. 8 with a cylindrical platinum ablation electrode 4 mm long, and three further mapping electrodes after its treatment

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Fig. 10



Electron microscope photograph of the platinum surface of the ablation electrode of a non-treated ablation catheter

Fig. 11

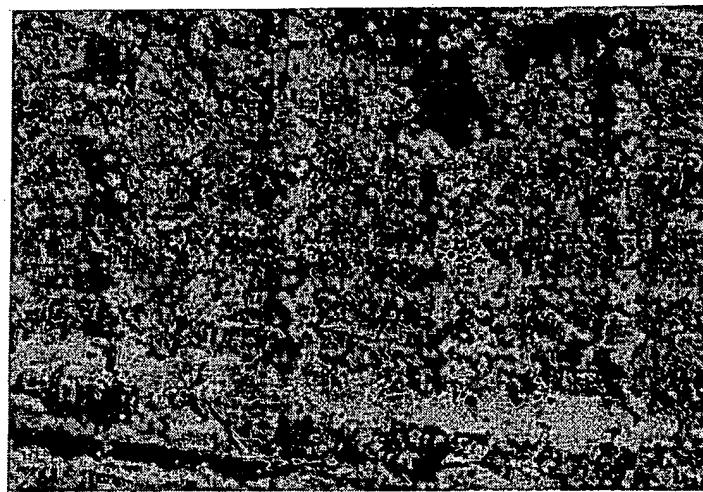


Electron microscope photograph of the platinum surface of the ablation electrode of the non-treated ablation catheter from Fig. 10

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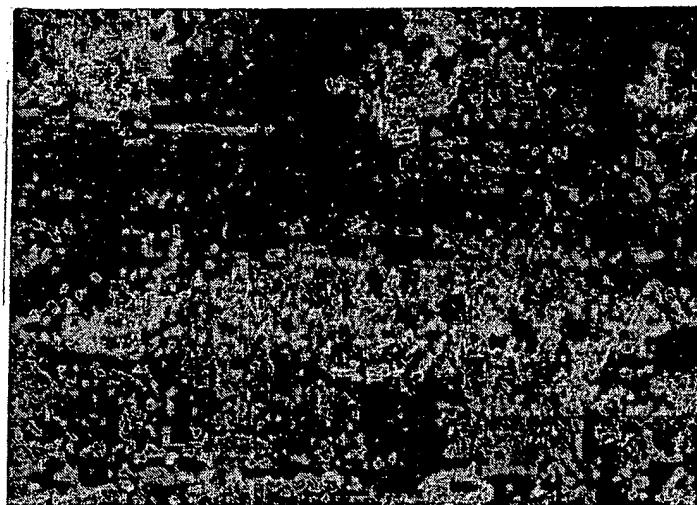
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Fig. 12



Electron microscope photograph of the platinum surface of the ablation electrode of the ablation catheter from Fig. 10

Fig. 13

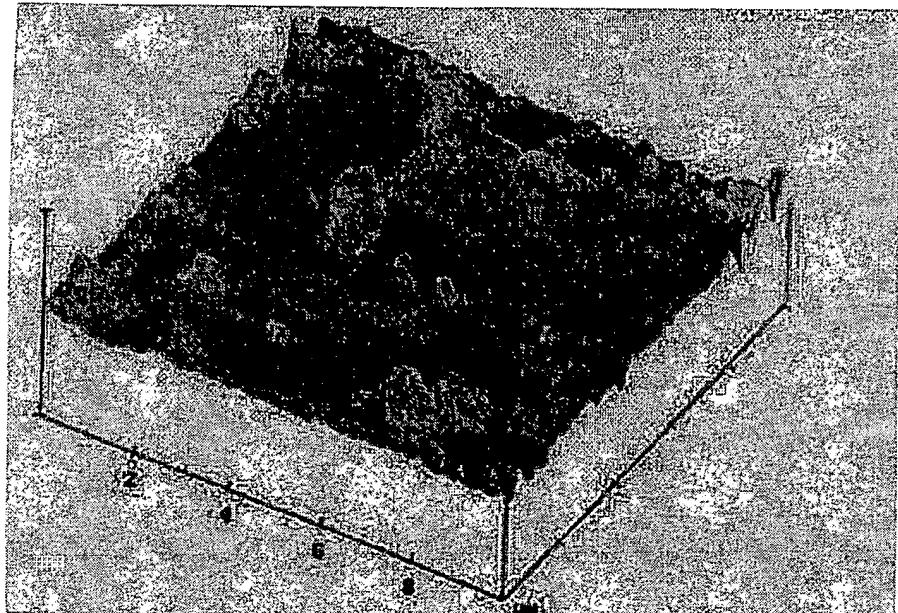


Electron microscope photograph of the platinum surface of the ablation electrode of the ablation catheter from Fig. 10

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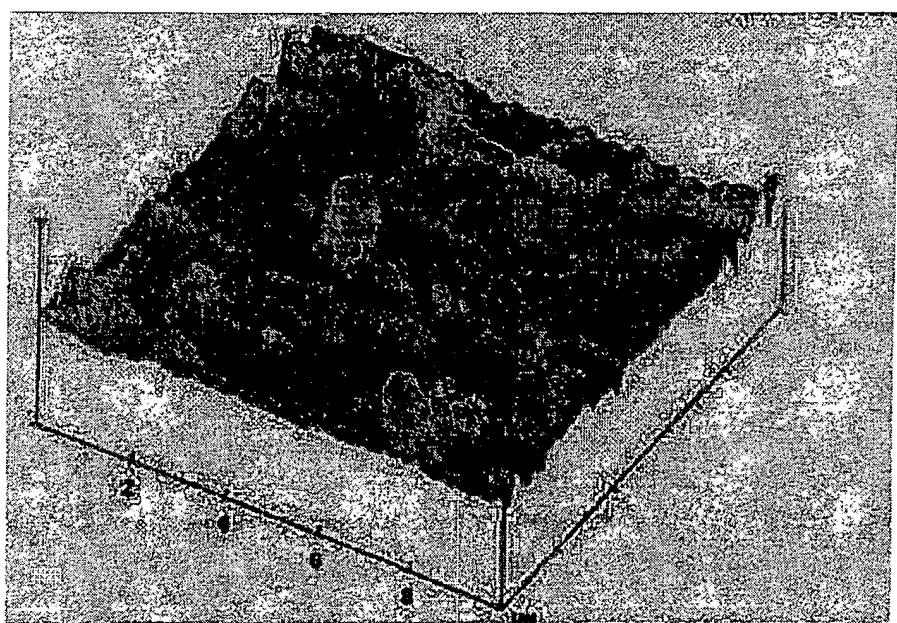
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Fig. 14



Force microscopic plot of a 10 times $10 \mu\text{m}$ surface region of an untreated platinum ablation electrode

Fig. 15



Force microscopic plot of a 10 times $10 \mu\text{m}$ surface region of a treated platinum ablation electrode